

PERRYVILLE

Health Clinic



Alaska Rural Primary Care Facility

Code and Condition Survey Report

July 23, 2001



I. EXECUTIVE SUMMARY

Overview

The Perryville Clinic is located in a small building which was reportedly constructed in 1990 and then converted for clinic use. In general, the clinic consists of two main rooms. There is limited storage space and equipment and furniture crowd the usable areas. The shortage of space compromises privacy, confidentiality, and security. The lack of adequate space for medical supplies and the absence of a trauma room prevent the staff from providing the level of care needed on a daily and emergency basis.

Renovation and Addition

The existing clinic is 800 s.f. and would require an addition of 1200 s.f. to meet the 2000 s.f. minimum area recommended for a medium clinic by the Alaska Rural Primary Care Facility study. The floor plan layout would require the remodel of approximately 100% of the interior space. Additionally, the poor condition of the building will require extensive upgrades to improve the foundation, roof, and other building systems. The cost of required renovations and code upgrades, combined with the cost of a new addition equal 169% of the cost of a new clinic.

New Clinic

Because the cost of renovation and addition is more than 75% of the cost of new construction, a new clinic of at least 2000 s.f. should be built to replace the existing clinic. The community prefers the current clinic location and has proposed to build the new clinic, if approved, on the current site, relocating the existing building to a new site. The current site is near utilities, the school, and other community services and is of adequate size to accommodate a larger structure.

II. GENERAL INFORMATION

A. The Purpose of the Report

ANTHC has entered into a cooperative agreement with the Denali Commission to provide management of the small clinic program under the Alaska Rural Primary Care Facility (ARPCF) assessment, planning, design, and construction. The purpose of the Code and Condition Survey Report is to validate the data provided by the community in the Alaska Rural Primary Care Facility Needs Assessment and to provide each community with a uniform standard of evaluation for comparison with other communities to determine the relative need among the communities of Alaska for funding assistance for the construction of new or remodeled clinic facilities. The information gathered will be tabulated and analyzed according to a set of fixed criteria that will yield a priority list for funding. Additionally, the relative costs of new construction vs. remodel/addition will be evaluated to determine the most practical and cost effective means to bring the clinics up to a uniform standard of program and construction quality. The information provided in this report is one component of the scoring for the small clinic RFP that the Denali Commission sent to communities in priority Groups 1 and 2.

B. The Assessment Team

The survey was conducted on June 6, 2001 by John Biggs, AIA, Architects Alaska and Bill Henriksen, PE, RSA Engineering. Randy Muth of ANTHC and Andrea Horn of Bristol Bay Area Health Corporation were the team escorts. Randy made introductions and conducted the village briefings. Team members who assisted in the preparation of the report included Stephen Schwicht and Ian VanBlankenstein of NANA/DOWL, project managers for the survey team, and Jay Lavoie of Estimations, Inc.

C. The Site Investigation

The format adopted is similar to the “Deep Look”, a facility investigation and condition report used by both ANTHC and the Public Health Service, in maintaining an ongoing database of facilities throughout the country. Facilities are evaluated with respect to the requirements of the governing building codes and design guidelines. Building code compliance, general facility condition, and program needs have been evaluated. This written report includes a floor plan of the clinic and a site plan indicating the existing clinic site. Additional information gathered during the site investigation that is referred to in the report, which includes sketches of building construction details, a building condition checklist, and proposed plans for village utility upgrades, are not included with this report. This information is available for viewing at ANTHC’s Anchorage offices and will be held for reference.

III. CLINIC INSPECTION SUMMARY

A. Community Information

The community of Perryville has a current population of 107 as published in the 2000 U.S. Census. It is located 275 miles southwest of Kodiak in the Aleutian Islands Recording District. It is a part of the Bristol Bay Native Corporation. Refer to the attached Alaska Community Database prepared by the Alaska Department of Community and Economic Development in Appendix C for additional community information.

B. General Clinic Information

The Perryville Clinic was constructed in 1990. This building is approximately 20' x 40' in size and is constructed of conventional frame walls, floor, and roof. Overall, the clinic is in poor to fair condition due to heavy use and severe weather conditions. There are two exits, one from each main room, located on the same side of the building. A relatively recent wooden deck/ramp entry has been added, however the access from the ramp is blocked by an inoperable sliding door. In general, this clinic has inadequate space to provide an appropriate level of health care for the community.

C. Program Deficiency Narrative

The main programmatic deficiencies pertain to lack of space and inadequate separation of public and private spaces. Additionally, equipment and furniture block clear travel space in some areas. The building has a ramp and a large sliding door at the ramp landing to provide trauma access, however, the sliding door is difficult to open completely and needs to be replaced. The clinic also lacks arctic entries, which has contributed to the degradation of the interior floor finishes.

The following table illustrates a comparison between the current actual square footage (SF) and the 2000 s.f. minimum area recommended by the Alaska Rural Primary Care Facility study for a Medium Clinic:

Table 1 – ARPCF Clinic Area Comparison

Purpose/Activity	#	Existing Net SF	#	ARPCF Medium	Difference
Arctic Entry	-		2	2 @ 50=100	100
Wait/Recep/Closet	1	80	1	150	70
Trauma/Telemed/Exam	1	48	1	200	152
Office/Exam	1	100	1	150	50
Admin./Records	1	100	1	110	10
Pharmacy/Lab	1	66	1	80	14
Portable X-ray	-		-		-
Spec. Clinic/Health Ed./Conf.	-		1	150	150
Patient Holding/Sleep Room	1	30	1	80	50
Storage	1	24	1	100	76
HC toilet	1	40	2	2 @ 60=120	80
Janitorial Closet	-		1	30	30
Total Net Area	-			1270	-
Mechanical Room	-			147	147
Morgue	-			30	30

The Perryville Clinic has a current gross area of 800 s.f. This would require a gross building area expansion of approximately 1200 s.f. in order to meet the 2000 s.f. minimum ARPCF requirements for a Medium clinic.

An analysis of the existing building's program functions follows. Please also refer to the floor plan in Section H:

- **Arctic Entries:** None provided.
- **Waiting:** : the waiting room is part of one of the main rooms and is not a separate area.
- **Trauma/Telemed/Exam:** The trauma room is part of one of the main rooms and is not a separate area.
- **Office/Exam:** The exam room is part of one of the main rooms and is not a separate area.

- **Administration/Records:** The administrative area is part of one of the main rooms and is not a separate area.
- **Pharmacy/Lab:** None provided
- **Specialty Clinics:** None provided
- **Patient Holding/Sleep:** A sleeping area is part of one of the main rooms and is not a separate area.
- **Storage:** A small storage room keeps the main medical/medicinal supplies.
- **HC Toilet Room:** The toilet room is undersized for handicapped access and lacks accessible fixtures.
- **Janitor Closet:** The janitorial area is located in the toilet room.
- **Ancillary Spaces:** There are no ancillary spaces in this clinic.

D. Architectural/Structural Condition

The building is approximately 20' x 40'. There is some settlement apparent by small cracks at gypsum board finishes. The building is highly weathered on the exterior due to the extreme environmental conditions. The interior shows much wear as well. The foundation appears to be large timber beams and sill beams held in place by treated wood pilings (the beams appear to be tied to the piles, but appear to rest on grade). The floor structure is 2x12 joists with hardboard soffit material. The walls are 2x6 framing with T-111 siding. The roof is metal roofing over plywood decking on 2x6 framing. The gypsum board interior ceiling appears to be applied to plywood panels under the roof framing. The roof framing does not show signs of sagging, however, the framing appears to be at its limit for supporting snow loads and probably will not support additional loading.

In addition to a complete interior remodel to provide the required separation between public, private, clean, and secure spaces, the roof should be strengthened and replaced. New equipment and furniture and new toilet room fixtures are required. The windows are inoperable and the exterior doors need to be repaired or replaced.

E. Site Considerations

The existing site appears to be well drained, although it is low in relation to other nearby sites. The existing site has access to utilities including village water, sewer, power, and telephone service directly to the building. Although a new site was not determined at the time of the survey, it appeared that equal or better sites were available for new construction, on higher ground and with similar or improved access to village utilities and services. A final decision has not yet been reached by the community regarding a preferred alternative site.

F. Mechanical Condition

Heating and Fuel Oil: Heating for the building is provided by two Toyostove oil heaters. One, a model 73 is located in the trauma area the other a model 55 is located in the office/sleep area. This heating system is inadequate for heating the clinic uniformly since each unit provides only a single, highly variable zone of heating. The nature of this heating arrangement is such that rooms where privacy or security is required will rapidly cool below the comfort zone and could also lead to freezing of plumbing and/or medications. A single 500-gallon fuel tank serves the two Toyostove heaters. The tank is not vented correctly, the fill has been modified with a bung from a 55-gallon drum, the tank is located less than 5 feet away from the building, and the piping is not well installed or supported. The fuel oil tank and all piping should be replaced.

Ventilation: There is no mechanical ventilation for the clinic. The sources of ventilation for the occupied spaces are though operable windows. The clinic needs to be provided with a mechanical ventilation system and should not rely on operable windows alone. The restroom has an exhaust fan, but it is a through the wall type that does not work well in the conditions that are expected. The exhaust fan should be a ceiling mounted fan with a back draft damper and ductwork extending out through the roof.

Plumbing: Domestic water is provided from the village water supply, hot water is provided from a Bock 32E, 32 gallon oil fired water heater. The tank located in the restroom and needs to be relocated; it is also not seismically and is old enough to expect its failure within one or two years. The sewer service size for the building is 4", but there is no cleanout for the building. There was little information available about the septic system, but there was speculation that it had been constructed from old fuel tanks. Maintenance of the septic system has been minimal. At the time we were on site the septic system was backed up and was being worked on. The septic system should be replaced in the near future. Fixtures in the building have not been vented correctly. There is only a single vent for the sewer pipe where it exits the building. Plumbing fixtures in the clinic include a toilet, lavatory, and shower in the restroom, a laundry sink is located in the exam room (installed without a vacuum breaker) and a double compartment sink is also located in the exam room. The plumbing fixtures in the restrooms do not meet ADA requirements.

G. Electrical Condition

Power: A 120/240-volt single phase underground electrical service is installed to the building with a 100-amp main disconnect provided at the meter. The main service wires are exposed at grade before extending up to the meter in rigid conduit. Conductors are all copper. There is a 200 amp three-phase panel jumpered to be used for single-phase service installed in the building. The panel needs to be replaced. All wiring from the panel has been run in Romex. Receptacles are provided throughout the clinic building. There appear to be an acceptable number of receptacles except in the restroom where there are no receptacles. Receptacles within 10 feet of exam room sink and the laundry sink were not GFCI protected. There were

no receptacles on the outside of the building. There are a number of code related electrical items that can be found in the Deficiency Evaluation and Cost Assessment forms.

Lighting and Emergency Fixtures: Interior lighting is provided by surface mounted florescent fixtures throughout the building. Lighting in the clinic is provided with two bulb 8 ft. surface mounted light fixtures and two bulb 4-ft. surface mounted fixtures using 35-watt 40F bulbs. The lighting levels were not measured, but appear poor. The light fixtures are in poor shape. Exterior lighting was provided with incandescent fixtures at the entrances only. The fixtures were in poor condition with no covers for the bulbs. All lights in the building should be replaced. There are three emergency light fixtures in the clinic, two located in the trauma/office area and the exam room office area. The batteries tested fine. There were no exit signs for the building. Two smoke detectors were installed in the building one in the exam room and the other in the trauma room. The smoke detector in the trauma room was not working. The battery was dead.

Telecommunication: Three phone lines serve the building, one for the local incoming line, a fax line and a dedicated line for modem. A Telemed system had been installed at this facility.

H. Existing Facility Floor Plan

See following sheet for the floor plan of the existing clinic.

J. Community Plan

Refer to the attached community plan for location of the existing clinic and the proposed location for the new clinic. If the existing clinic site is the preferred location or if a new site has not yet been selected, only the existing clinic location will be shown.

IV. DEFICIENCY EVALUATION AND COST ASSESSMENT

The attached deficiency reporting forms are based on Public Health Service form AK H SA-43. The forms are numbered sequentially for each discipline starting with **A01** for Architectural and structural deficiencies, **M01** for Mechanical deficiencies and **E01** for Electrical deficiencies.

A. Deficiency Codes

Deficiencies are further categorized according to the following PHS Deficiency codes to allow the work to be prioritized for federal funding, should that apply. Deficiency codes used in this survey include:

- 02 Fire and Life Safety:** These deficiencies identify areas where the facility is not constructed or maintained in compliance with provisions of the state mandated building codes including the International Building Code, The Uniform Fire Code, NFPA 101, The Uniform Mechanical and Plumbing Codes and The National Electrical Code.
- 03 Safety:** These deficiencies identify miscellaneous safety issues.
- 04 Environmental Quality:** This addresses DEC regulations, hazardous materials and general sanitation.
- 05 Program Deficiencies:** These are deficiencies which show up as variations from space guidelines established in the Alaska Primary Care Facility Facility Needs Assessment Project and as further evaluated through observation at the facility site and documented in the facility floor plans.
- 07 Disability Access Deficiencies:** The items with this category listing are not in compliance with the Americans with Disabilities Act.
- 08 Energy Management:** These deficiencies address the efficiency of heating systems/fuel types and the thermal enclosures of buildings.
- 11 Structural Deficiencies:** These are deficiencies with the fabric of the building. It may include the foundations, the roof or wall structure, the materials used, the insulation and vapor retarders, the attic or crawl space ventilation and the general condition of interior finishes. Foundation systems are included in this category.
- 12 Mechanical Deficiencies:** These are deficiencies in the plumbing, heating, ventilating, air conditioning, or medical air systems.
- 13 Electrical Deficiencies:** These are deficiencies with electrical generating and distribution systems, fire alarm systems and communications systems.
- 14 Utilities:** This category is used for site utilities, as opposed to those within the building and may include sewer lines and water and power distribution.

B. Photographs

Each sheet has space for a photograph. Some deficiencies do not have photos. Photographs do not cover all areas where the deficiencies occur but are intended to provide a visual reference to persons viewing the report who are not familiar with the facility. Additional photographs of the clinic and the surrounding area are included in Appendix B.

C. Cost Estimate General Provisions

New Clinic Construction

- **Base Cost**

The Base Cost provided in Section VI of this report is the direct cost of construction, inclusive of general requirements (described below) and contingency for design unknowns (an estimating contingency). The base cost is exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The Project Factors and Area Cost Factor are multipliers of the base costs.

General Requirements are based on Anchorage costs without area adjustment. It is included in the Base Cost for New Clinics. These costs are indirect construction cost not specifically identifiable to individual line items. It consists of supervision, materials control, submittals and coordination, etc. The general requirements factor has not been adjusted for Indian Preference.

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned.

- **Project Cost Factors**

Equipment Costs for new medical equipment has been added at 17% of the cost of new floor space.

Design Services is included at 10% to cover professional services including engineering and design.

Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.

Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Estimated Total Project Cost of New Building**

This is the total estimated cost of the project, including design services. The construction contract will be work subject to Davis Bacon wages, and assumes construction before year-end 2001. No inflation factor has been applied to this data.

Remodel, Renovations, and Additions

- **Base Cost**

The Base Cost provided in the specific deficiency sheets is the direct cost of construction, exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Most of the deficiency items do not constitute projects of sufficient size to obtain efficiency of scale. The estimate assumes that the projects are completed either individually, or combined with other similar projects of like scope. The numbers include moderate allowances for difficulties encountered in working in occupied spaces and are based on remodeling rather than on new construction costs. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The General Requirements, Design Contingency and Area Cost Factors are multipliers of the base costs.

The cost of Additions to clinics is estimated at a unit cost higher than New clinics due to the complexities of tying into the existing structures.

Medical equipment is calculated at 17% of Base Cost for additions of new space only and is included as a line item in the estimate of base costs.

- **General Requirements Factor**

General Requirements Factor is based on Anchorage costs without area adjustment. The factor is 1.20. It is multiplied by the Base Cost to get the project cost, exclusive of planning, architecture, engineering and administrative costs. This factor assumes projects include multiple deficiencies, which are then consolidated into single projects for economies of scale. The general requirements factor has not been adjusted for Indian Preference.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Contingency for Design Unknowns (Estimating Contingency)**

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned. The factor used is 1.15.

- **Estimated Total Cost**

This is the total estimated bid cost for work completed under Davis Bacon wage contracts, assuming construction before year-end 2001. This is the number that is entered in the front of the deficiency form. No inflation factor has been applied to this data.

- **Project Cost Factors**

Similar to new clinics, the following project factors have been included in Section VI of this report.

Design Services is included at 10% to cover professional services including engineering and design.

Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.

Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Estimated Total Project Cost of Remodel/Addition**

This is the total estimated cost of the project including design services, the construction contract cost for work completed under Davis Bacon wages and assuming construction before year-end 2001. No inflation factor has been applied to this data.

V. SUMMARY OF EXISTING CLINIC DEFICIENCIES

The attached table summarizes the deficiencies at the clinic and provides a cost estimate to accomplish the proposed modifications. If all deficiencies were to be addressed in a single construction project there would be cost savings that are not reflected in this tabulation. The total cost of remodel/addition shown in Section VI is intended to show an overall remodel cost that reflects this economy. Refer to Section VI for a comparison of remodel/addition costs to the cost of new construction. The specific deficiency sheets are included in Appendix A.

VI. NEW CLINIC ANALYSIS

The decision on whether to fund new clinic construction or a remodel/addition of the existing clinic is to be determined by comparing the cost of a new facility designed to meet the program requirements of the Alaska Rural Primary Care Facilities minimum area requirements with the projected combined cost of renovating, remodeling and adding onto the existing building to provide an equivalent facility. If the cost of the remodel/addition project is greater than 75% of the cost of constructing an altogether new facility then a new facility is recommended. That ratio is computed as follows:

- **The cost of a new clinic in Perryville is projected to be:**

Base Anchorage Cost per s.f.	\$183/ s.f.
Medical Equipment Costs @ 17%	\$31
Design Services 10%	\$18
Construction Contingency 10%	\$18
Construction Administration. 8%	\$15
Sub-total	\$265/ s.f.
Area Cost Factor for Perryville 1.66*	
Adjusted Cost per s.f.	\$439/ s.f.

Total Project Cost of NEW BUILDING 2,000 x \$439 = \$878,000

- **The cost of a Remodel/Renovation/Addition is projected to be:**

Projected cost of code/condition renovations (From the deficiency summary)	
90% of cost of code/condition improvement**	\$456,817 Renovation
Projected cost of remodeling work (See A02)	
800 s.f. clinic @ 100% remodel = 800 s.f.	\$107,219 Remodel
Projected cost of building addition (A01)	
2,000 s.f. – 800 s.f. = 1,200 s.f.	\$596,655 Addition
<input type="text"/> Design 10%, Const. Contingency 10%, Const. Admin. 8%	\$324,993

Total Project Cost of REMODEL ADDITION \$1,485,684

- **Ratio of remodel:new is \$1,485,684 : \$878,000 = 1.69X**

The cost of a remodel/addition for this clinic would cost 169% the cost of a new clinic, therefore, a new clinic is recommended for this community.

* The Area Cost Factor was refined by Estimations, Inc. in July 2001 based on information obtained during the site visit.

** The 90% factor represents economy of scale by completing all renovation work in the same project.

Appendix A: SPECIFIC DEFICIENCIES LISTING

Refer to the attached sheets for the listing of the individual deficiencies and the corrective action recommended.

Appendix B: GENERAL SITE PHOTOGRAPHS

The following sheets provide additional photographic documentation of the existing building and surroundings.

Appendix C: ADCED Community Profile

Refer to the attached document prepared by Alaska Department of Community and Economic Development profiling the community of Perryville.

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